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Docket No: RANPP0170USA

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re **PATENT** application of:

Applicant:	Harding, et al.
Application No.:	09/781,733
Filing Date:	February 12, 2001
Title:	CUSHIONING CONVERSION MACHINE AND METHOD WITH STOCK USAGE MONITORING
Examiner:	Christopher R. Harmon
Art Unit:	3721
Confirmation No.:	4193

APPEAL BRIEF

Mail Stop: Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This brief, which is submitted in triplicate and with a Petition for an Extension of Time, is filed in connection with the appeal of the above-identified application.

I. Real Party in Interest

The real party in interest in the present appeal is Ranpak Corp., the assignee of the present application.

II. Related Appeals and Interferences

Appellant, appellant's undersigned representative, and/or the assignee of the present application are unaware of any appeals or interferences which will directly affect, which will be directly affected by, or which will have a bearing on the Board's decision in the pending appeal.

III. Status of Claims

Claims 6-32 are pending in the application, stand finally rejected and are the subject of this appeal.

IV. Status of Amendments

No amendment to the claims or the specification was filed subsequent to final rejection.

V. Summary of Invention

The advantages of rapidly produced cushioning material, such as low density cushioning pads made from sheet stock material by a cushioning conversion machine, over other packaging materials, such as plastic peanuts, are well known.[1] One advantage is the ability to produce a cushioning pad of a desired length from a biodegradable, recyclable and renewable raw material, such as kraft paper. Another significant advantage is a reduction in the storage space needed to warehouse the raw materials (i.e., sheet stock material can be stored on rolls, but peanuts take up a considerable amount of volume).

As a result of these advantages, convert-on-demand paper protective packaging materials have become a very popular alternative and a corresponding demand for suitable cushioning conversion machines has been created. Nevertheless, prior to

[1] See, specification, page 1, line 15 to page 2, line 15.

appellants' invention, there was no appreciation of a need for and/or an advantage gained by monitoring stock material usage by a conversion machine over a period of time during which a plurality of cushioning pads are made (e.g., during the course of a work shift, during the course of a day or a week) by a conversion process and storing corresponding length usage information in a memory (e.g., for subsequent retrieval).

The invention described herein advantageously allows the managers of a facility using a cushioning conversion machine to carry out a number of functions that previously required tedious tracking routines. Access to stored information as claimed in the present application allows evaluating when additional stock material should be reordered while minimizing the need to physically count the amount of stock material on hand and minimizing the chance of completely running out of stock material that could shut down packaging operations. Access to the stored information could also assist in tracking worker productivity and/or determining when to schedule maintenance of the cushioning conversion machine.

Stock material vendors also can realize certain advantages from access to the stored information that were previously not possible. For instance, the vendor could generate an invoice based on the amount of stock material that a customer actually consumes or based on the cumulative length of pads generated. As another example, the vendor could compare actual stock material usage versus quantities sold to evaluate whether the customer has obtained stock material from an alternative supplier, potentially in breach of a contract.

The invention defined in the claims on appeal reflects the appellants' appreciation of the need for and advantages of monitoring and storing stock material usage. As recited in the claims on appeal, stock material usage during a period of time during which a plurality of cushioning products are produced can be in terms of cumulative amount of stock material that passes through the cushioning conversion machine or cumulative length of cushioning products produced.

More particularly, one aspect of the invention relates to a method of determining a total amount of stock material passing through a cushioning conversion machine 10 (FIG. 1) over a period of time during which a plurality of three-dimensional cushioning products are made. The method includes providing a sheet stock material and converting the sheet stock material into a plurality of the three-dimensional cushioning products with the cushioning conversion machine during the period of time. The passage of stock material through the cushioning conversion machine during the period of time is monitored. Information regarding the total amount of stock material that passed through the cushioning conversion machine during the period of time is stored in a computer memory 230 (FIG. 9). The method also includes retrieving the stored information, where the retrieved stored information provides an indication of the total amount of stock material that passed through the cushioning conversion machine during the period of time. The converting step is accomplished by a cushioning conversion machine including a conversion assembly 14 and a stock supply assembly 18, the sheet stock material being supplied from the stock supply assembly to the conversion assembly.[2]

Another aspect of the invention relates to a method of determining a total cumulative length of multiple three-dimensional cushioning products produced by a cushioning conversion machine 10 (FIG. 1) over a period of time. The method includes generating signals in accordance with the monitored lengths of the cushioning products produced by the cushioning conversion machine during the period of time. The method also includes storing the generated signals as total cumulative length information in a computer memory and retrieving the total cumulative length information to determine

[2] Specification, page 31, line 3 to page 32, line 22 and page 35, lines 11-14; and Figures 1 and 9.

total cumulative length of the cushioning products produced by the cushioning conversion machine during the period of time.[3]

Another aspect of the invention relates to a method determining the total length of multiple dunnage products produced by a dunnage conversion machine 10 (FIG. 1) during a period of time. The method includes monitoring the cumulative length of dunnage products produced by the dunnage conversion machine during the conversion of the stock material into each of the products. Information regarding the cumulative length of dunnage products produced by the dunnage conversion machine during the period of time is stored in a computer memory 230 (FIG. 9). The method also includes retrieving the stored cumulative length information where the retrieved cumulative length information provides an indication of the cumulative length of dunnage products produced by the dunnage conversion machine during the period of time.[4]

Yet another aspect of the invention relates to a method of determining stock material usage by a cushioning conversion machine 10 (FIG. 1) over a period of time during which a plurality of three-dimensional cushioning products are made. The method includes monitoring the stock material usage by the cushioning conversion machine during the period of time. The method also includes storing information regarding the cumulative amount of stock material usage by the cushioning conversion machine during the period of time in a memory 230 (FIG. 9).[5]

In sum, the invention defined in the claims on appeal stem from the appellants' appreciation of the advantages of monitoring stock material usage over a period of time

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[3] Specification, page 31, line 3 to page 32, line 9 and page 33, lines 1-6; and Figures 1 and 9.

[4] Specification, page 31, line 3 to page 32, line 9 and page 33, lines 1-6; and Figures 1 and 9.

[5] Specification, page 31, line 3 to page 32, line 22; page 33, lines 1-6 and page 35, lines 11-14; and Figures 1 and 9.

during which a plurality of cushioning products are made and storing corresponding stock material usage information.

VI. Applied Prior Art

U.S. Patent No. 5,571,067 to Ratzel; and

U.S. Patent No. 4,366,372 to Sargent.

VII. Issues

A. Whether claims 6-11, 13 and 15-21 are patentable under 35 U.S.C. § 102(e) over Ratzel.

B. Whether claims 12, 14 and 22-32 are patentable under 35 U.S.C. § 103(a) over Ratzel in view of Sargent.

VIII. Grouping of Claims[6]

For the purposes of this appeal only, the claims are grouped as follows:

Issue A: Claims 7-9 and 15-19 stand or fall with claim 6. The remaining claims (claims 6, 10-11, 13, 20 and 21) do not stand or fall with any other claim.

Issue B: Claims 30 and 31 stand of fall with claim 22. The remaining claims (claims 12, 14, 23-29 and 32) do not stand or fall with any other claim.

IX. Argument

Issue A

Claims 6-11, 13 and 15-21 have been finally rejected as being anticipated by Ratzel. The Examiner contends:

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[6] This grouping is conditioned upon the Examiner not entering any new grounds of rejection and/or any new points of argument.

> Ratzel discloses a method of determining a total amount of stock material passing through a cushioning conversion machine comprising providing sheet material S, converting material S into cushioning product P, and monitoring passage of stock material through conversion machine 10. Information of the amount of stock material is stored, retrieved, and exchanged with conversion machine 10 by process controller/computer 11.[7]

It is respectfully submitted that the Examiner has misapplied the reference since Ratzel fails to teach or reasonably suggest all aspects of the claims rejected under 35 U.S.C. § 102(e).

Turning to claim 6, claim 6 includes features of monitoring the passage of stock material through a cushioning conversion machine during a period of time during which a plurality of three-dimensional cushioning products are made. Also recited is storing in a memory information regarding the total amount of stock material passed through the machine during the period of time. The stored information is then retrieved.

As set forth in claim 6, the total length of stock material itself that is passed through the machine during period of time during which multiple cushioning products are made is tracked and a corresponding indication of that stock material usage is stored.

Ratzel does not teach or reasonably suggest the subject matter of claim 6. Ratzel teaches measuring the length of an individual cushioning product to determine when a desired length is achieved.[8] The measurement of the individual cushioning product is used to control the length of the pad so that the actually generated pad length corresponds to the a predetermined desired length of the pad.[9]

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[7] Final office action dated March 20, 2003, page 2.

[8] Abstract, lines 3-6; column 1, lines 10-13 and column 4, lines 21-30.

[9] See, among other locations, column 6, lines 45 to col. 7, line 2.

Ratzel's cushioning product measurement differs from the subject matter of claim 6 in at least two regards. First, the length of a produced cushioning product may not be equal to the amount of stock material passed through the conversion machine to produce the product. Typically, the linear length of unconverted stock material consumed to generate a certain cushioning product is longer than the linear length of the final cushioning product. Therefore, the parameter measured in claim 6 differs from the parameter measured by Ratzel.

Second, no total amount of stock material that passed through the cushioning conversion machine during a period of time where multiple cushioning products are produced is monitored and/or stored in Ratzel. There is no indication in Ratzel that the lengths of multiple cushioning products are cumulatively tracked to establish a total length indication. Although it is recognized that a controller of the Ratzel conversion machine may command the generation of multiple cushioning products, the production of one cushioning product at a time is monitored for length without regard to the measured length of a previously produced cushioning product or a subsequently produced cushioning product.

Accordingly, no indication of total amount of stock material passed through a conversion machine during a time when multiple cushioning products are produced is stored by Ratzel's system and such an indication cannot be retrieved from the Ratzel system. It follows that none of the advantages of the present invention can be realized by Ratzel's system. Without the ability to retrieve an indication of total stock material consumption, data useful for inventory tracking and reordering is not available. Also not available is data directly indicative of packaging worker productivity. In addition, stock material vendors would be without data useful in generating an invoice based on the amount of stock material that a customer actually consumes. Nor would the stock material vendor have access to data that could help police the origin of stock material used by a customer.

Turning to the claims that depend from claim 6, claim 10 recites that the storing act is accomplished by a non-volatile memory (a memory that retains data upon the loss of power). There is no indication in Ratzel to store information in a non-volatile memory associated with a cushioning conversion machine, much less an indicator of total stock material that passed through the cushioning conversion machine during a period of time when multiple cushioning products are produced.

Claim 11 includes transmitting the stored information to a remote terminal. Ratzel does not teach or suggest transmitting a stored indicator of total stock material that passed through the cushioning conversion machine during a period of time when multiple cushioning products are produced.

Claim 13 includes automatically downloading the stored information to a remote processor. Ratzel does not teach or suggest automatically downloading a stored indicator of total stock material that passed through the cushioning conversion machine during a period of time when multiple cushioning products are produced to a remote location.

Turning now to independent claim 20, claim 20 is directed to a method of determining total cumulative length of three-dimensional cushioning products produced by a cushioning conversion machine over a period of time by monitoring the length of cushioning products produced and storing corresponding signals as total cumulative length information. Such information is retrieved to determine total length of the cushioning products produced during the period of time in question.

Although Ratzel does measure the length of cushioning product that is produced, Ratzel does so on a cushioning product by cushioning product basis. There is no teaching or suggestion in Ratzel to track total cumulative length for multiple cushioning products as set forth by claim 20.

Turning now to independent claim 21, claim 21 is directed to a method of determining the total length of dunnage products produced by a dunnage conversion machine during a period of time. The cumulative length of the dunnage products are

monitored and information regarding the cumulative length produced during the period of time in question is stored. The method also includes retrieving the stored cumulative length information thereby providing an indication of the cumulative length of the dunnage products produced during the period of time.

Although Ratzel does measure produced cushioning product length, Ratzel does so on a cushioning product by cushioning product basis. There is no teaching or suggestion in Ratzel to track cumulative length of dunnage products produced during a period of time as set forth by claim 21.

As set forth above, Ratzel does not teach or fairly suggest the subject matter of claims 6-11, 13 and 15-21. Also, unmotivated changes to Ratzel would be required to arrive at the invention as set forth in independent claims 6, 20 and 21 and the claims depending from claim 6. Accordingly, the rejection of claims 6-11, 13 and 15-21 under 35 U.S.C. § 102(e) should be reversed.

Issue B

Claims 12, 14 and 22-32 have been finally rejected as being obvious over Ratzel in view of Sargent. The Examiner contends:

> Ratzel does not directly disclose transmitting information to a personal computer or using a visual display, however Sargent teaches a length measuring system with a visual display 8. The measuring system stores the cumulative amount of material over a period of time and produces an output of length deviation over the length of the material for adjusting the web feed process.
>
> It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include a data processing system with a visual display as taught by Sargent in the invention of Ratzel in order to assist in monitoring the process of operation.

It is respectfully submitted that the Examiner has failed to establish a *prima facie* case of obviousness. More specifically, the references, by themselves or in combination, fail to teach or reasonably suggest the subject matter of the claims

rejected under 35 U.S.C. § 103(a). In addition, there is no motivation for making the proposed combination.

Claims 12 and 14 depend from claim 6. The deficiencies of Ratzel as a teaching reference with respect to claim 6 are discussed above and, for the purposes brevity, will not be repeated. Sargent does not cure these deficiencies, nor does Sargent teach or suggest the features recited in claims 12 or 14.

Claim 12 includes transmitting the stored information to a personal computer as part of the retrieving act of claim 6. Although Sargent will be discussed in greater detail below, it should be clear that no personal computer is shown in Sargent. Nor has the Examiner clearly explained how a personal computer is taught or suggested by Sargent. Admittedly, Sargent does show a remote unit C. The remote unit C contains dedicated circuitry for accomplishing the limited objects of Sargent (see, column 1, line 53 to column 2, line 49) rather than general purpose computing ability as found in personal computers.

Moreover, real time information is transmitted from a sensor unit B to the remote unit C for processing. In contrast, the subject matter of claim 12 involves transmitting stored information, wherein that stored information regards the total amount of stock material that passed through the cushioning conversion machine during a period of time during which a plurality of three-dimensional cushioning products are made.

Claim 14 involves using a visual display to view the stored information as part of the retrieving act of claim 6. Although Sargent does include display devices, Sargent does not teach or suggest storing, retrieving and displaying the above-described information regarding total amount of stock material passed through a conversion machine during a time period when multiple cushioning products are produced.

Turning to independent claim 22, claim 22 includes features of converting sheet stock material into a plurality of three-dimensional cushioning products, monitoring the stock material usage and storing information regarding the cumulative amount of stock

material usage by the cushioning conversion machine during a period of time during which a plurality of three-dimensional cushioning products are made in a memory.

The deficiencies of Ratzel as a teaching reference with the foregoing features are discussed above and, for the purposes brevity, will not be repeated. Sargent does not cure these deficiencies since Sargent does not teach or suggest the features of claim 22.

Sargent is directed to a system where multiple layers of a printed document are aligned using holes punched in the printed layers.[10] The holes may have different spacing when the sheet material use to produce the multiple layers is under tension versus when the sheet material is relaxed. Sargent accounts for this problem by measuring a reference length (referred to by Sargent as a board length) during operation of the system and comparing this board length to a standard length to generate a deviation value.[11]

No cushioning conversion is conducted by Sargent. More importantly, there is no indication in Sargent to store any length measurement information that regards a cumulative amount of stock material usage during the production of multiple cushioning products.

Sargent measures length of a running web in two manners. In the first manner, an optical system 1 counts the holes in the web of material. This information is used to generate the reference length (or board length) such that a deviation between the measured board length and a standard length can be determined.[12] This information is also used to determine if the board length is longer or shorter than desired.

Although a storage circuit 35 is used to hold Sargent's deviation information, the information does not correspond to cumulative stock material usage information for the

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[10] Sargent, column 1, lines 12-23.

[11] Sargent, column 1, lines 53-56 and column 2, lines 22-34.

[12] Sargent, column 3, line 47 to column 6, line 34.

production of multiple cushioning products, and the storage circuit 35 is more akin to a temporary buffer to hold data for a display driver than the claimed memory (e.g., a memory from which information can subsequently be retrieved). Once the deviation is determined, Sargent's information is used to reset tension of the printing system and the process is started over again.[13] Sargent does not indicate that cumulating measurement data over multiple operations is made or would be desirable.

In the second measurement process, a mechanical system 5 measures the running length of the web so that it is known when to stop measuring board length with the optical system.[14] Also, Sargent is configured to generate a showing of the paper consumed in feet from the pulses generated by the mechanical system.[15] More specifically, counted pulses are divided by the expected number of pulses per foot of paper (the number being 240 in Sargent) by a divider 22 that supplies a pulse for each foot of paper consumed to a manually resettable counter 23. In turn, a display control 24 controls a display 25 to show how much paper was consumed in one foot increments.

This length measurement differs from the monitoring and storing as set forth in claim 22. In fact, it is submitted that the measurement made by Sargent is not stored in a memory as claimed, but is merely displayed. Also, there is no indication in Sargent to store the claimed type of information. That is, there is no teaching or suggestion in Sargent to keep track of any type of data that would provide a direct indication of stock material usage during a period of time in which multiple cushioning products are made. As a result, there is no value stored by Sargent that could be used to track stock material inventory, track worker productivity, generate invoices and the like.

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[13] Sargent, column 19, lines 12-24.

[14] Sargent, column 4, lines 38-60 and column 5, lines 28-47.

[15] Sargent, column 5, lines 26-27 and column 6, lines 53-58.

Turning to the claims that depend from claim 22, claim 23 recites that the monitoring includes monitoring the passage of stock material through the cushioning conversion machine during the period of time. As indicated, Ratzel monitors generated cushioning product length on an individual cushioning product basis and not stock material passed through the conversion machine. Sargent does measure stock material, but not in a conversion machine and does not store information regarding cumulative amount of stock material usage by the cushioning conversion machine during a time period when multiple cushioning products are made. Therefore, the combination of Ratzel and Sargent does not arrive at the subject matter of claim 23.

Claim 24 recites that the stored information is indicative of the cumulative amount of stock material that passed through the cushioning conversion machine during a period of time during which multiple cushioning products are generated. As indicated, neither Ratzel nor Sargent teaches or suggest storing the claimed information and, as a result, their combination does not arrive at the subject matter of claim 24.

Claim 25 recites that the monitoring includes monitoring the cumulative length of cushioning products produced by the cushioning conversion machine during the period of time. As indicated, Ratzel monitors generated cushioning product length on an individual cushioning product basis and not cumulative length of cushioning products. Sargent, at best, measures stock material passing through a printing press and not cumulative length of produced cushioning products. Therefore, the combination of Ratzel and Sargent does not arrive at the subject matter of claim 25.

Claim 26 recites that the stored information is indicative of the cumulative length of cushioning products produced by the cushioning conversion machine during a period of time during which multiple cushioning products are generated. As indicated, Ratzel does not store the claimed information. Sargent, at best, measures stock material passing through a printing press and does not store cumulative length of produced cushioning products. Therefore, the combination of Ratzel and Sargent does not arrive at the subject matter of claim 26.

Claim 27 recites that the method further comprises retrieving the stored information. Neither of the references, or their combination, teaches or suggests retrieving stored information regarding the cumulative amount of stock material usage by a cushioning conversion machine during a period of time during which multiple cushioning products are made.

Claim 28 includes transmitting the stored information to a remote location. Neither of the references, or their combination, teaches or suggests transmitting stored information regarding the cumulative amount of stock material usage by a cushioning conversion machine during a period of time during which multiple cushioning products are made.

Claim 29 includes automatically downloading the stored information. Neither of the references, or their combination, teaches or suggests automatically downloading stored information regarding the cumulative amount of stock material usage by a cushioning conversion machine during a period of time during which multiple cushioning products are made.

Claim 32 recites that the memory is a non-volatile memory (a memory that retains data upon the loss of power). There is no indication in Ratzel to store the claimed information in a non-volatile memory associated with a cushioning conversion machine. Also, the buffer type storage devices of Sargent are most likely volatile devices that would lose any retained data upon loss of power. Even if the Sargent devices were non-volatile, Sargent does not store the claimed information.

As set forth above, Ratzel, Sargent and their combination do not teach or fairly suggest the subject matter of claims 12, 14 and 22-32. Even if their combination were made, the subject matter of these claims would not result and unmotivated changes to the combination would be required.

Also, motivation to make the combination of Ratzel and Sargent is lacking. Sargent is from the printing arts where alignment of a collation of printed sheets is an issue. Differences in the web of material during printing and alignment hole punching

caused by machine induced tension versus when the printed material is relaxed can lead to these alignment issues. Accordingly, Sargent is directed primarily to calculating web length deviation from a standard length so that the machine tension can be adjusted. Issues related to relaxed length versus length under tension are generally not a concern in the cushioning conversion arts. In addition, Sargent does not recognize the advantages of tracking cumulative stock material usage in the claimed manner, such as for inventory tracking, worker productivity tracking, invoice generation, contract policing and so forth.

In Ratzel, the issue addressed is how to make a precise length of cushioning product. Sargent does not provide any techniques for improving the generation of a cushioning product of a desired length. Accordingly, one of ordinary skill in the art of converting stock material to cushioning products and knowledgeable of Ratzel would have little reason to look to Sargent to assist in monitoring the process of operation as asserted by the Examiner.

Appellants are interested in cumulative stock material usage information at the conclusion of multiple cushioning product generation cycles to address issues related to packing facility management and stock material vendor/packing facility interaction. Neither of the references are concerned with such issues and their proposed combination is, at best, an impermissible use of hindsight to attempt to reconstruct that which is claimed from references originating from diverse arts.

Accordingly, the rejection of claims 12, 14 and 22-32 under 35 U.S.C. § 103(a) should be reversed.

X. Conclusion

In view of the foregoing, the Appellants respectfully submit that the claims are patentable over the applied art and that the final rejections should be reversed.

This brief is being submitted in triplicate along with a Petition for a two month extension of time and a check in the amount of $365.00 in satisfaction of the small

entity appeal brief fee and the extension of time fee. Should an addition extension of time be necessary, petition is hereby made and the Commissioner is Authorized to charge any fees to Deposit Account No. 18-0988 Order No. RANPP0170USA.

Respectfully submitted,
RENNER, OTTO, BOISSELLE & SKLAR, L.L.P.

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CERTIFICATE OF MAILING (37 CFR 1.8a)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop: Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

September 24, 2003 — Date
M. David Galin — Name of person mailing paper
_____ — Signature

APPENDIX A
Claims on Appeal

6. A method of determining a total amount of stock material passing through a cushioning conversion machine over a period of time during which a plurality of three-dimensional cushioning products are made, said method comprising the acts of:

providing a sheet stock material;

converting the sheet stock material into a plurality of the three-dimensional cushioning products with the cushioning conversion machine during the period of time;

monitoring the passage of stock material through the cushioning conversion machine during the period of time;

storing in a computer memory information regarding the total amount of stock material that passed through the cushioning conversion machine during the period of time; and

retrieving the stored information, the retrieved stored information providing an indication of the total amount of stock material that passed through the cushioning conversion machine during the period of time; and

wherein the converting step is accomplished by a cushioning conversion machine including a conversion assembly and a stock supply assembly, sheet stock material being supplied from the stock supply assembly to the conversion assembly.

7. A method as set forth in claim 6 wherein the converting act is accomplished by a cushioning conversion machine in which a feed assembly is positioned downstream of a forming assembly.

8. A method as set forth in claim 7 wherein said monitoring act includes tracking the strip of dunnage produced by the conversion assembly at a location downstream of the forming assembly.

9. A method as set forth in claim 7 wherein said converting act is accomplished by a conversion machine in which the feed assembly includes a rotating

member having an angular movement which directly corresponds to a length dimension of the strip of dunnage and wherein said tracking comprises monitoring the angular movement of the rotating member.

10. A method as set forth in claim 6 wherein the storing act is accomplished by a non-volatile memory.

11. A method as set forth in claim 6 wherein the retrieving act comprises transmitting the stored information to a remote terminal.

12. A method as set forth in claim 6 wherein the retrieving act comprises transmitting the stored information to a personal computer.

13. A method as set forth in claim 6 wherein said retrieving act includes automatically downloading the stored information to a remote processor.

14. A method as set forth in claim 6 wherein said retrieving act includes using a visual display to view the stored information.

15. A method as set forth in claim 6 wherein said providing act includes providing sheet stock material that is biodegradable, recyclable, and reusable.

16. A method as set forth in claim 15 wherein said providing act includes providing sheet stock material that is Kraft paper.

17. A method as set forth in claim 16 wherein said providing act includes providing sheet stock material that comprises multiple plies of Kraft paper.

18. A method as set forth in claim 17 wherein said providing act includes providing sheet stock material that comprises a roll of superimposed plies of Kraft paper.

19. A method as set forth in claim 18 wherein said providing act includes providing a roll that is approximately thirty inches wide.

20. A method of determining a total cumulative length of three-dimensional cushioning products produced by a cushioning conversion machine over a period of time, comprising the steps of:

using the cushioning conversion machine to convert the stock material into a plurality of the three-dimensional cushioning products during the period of time;

monitoring the length of the cushioning products produced by the cushioning conversion machine during the conversion of the stock material into the cushioning products;

generating signals in accordance with the monitored lengths of the cushioning products produced by the cushioning conversion machine during the period of time;

storing the generated signals as total cumulative length information in a computer memory; and

retrieving the total cumulative length information to determine total cumulative length of the cushioning products produced by the cushioning conversion machine during the period of time;

wherein the cushioning conversion machine includes a forming assembly having forming components which contact and form the sheet stock material and a feed assembly which feeds the stock material through the forming assembly; and

wherein the monitoring step includes tracking passage of the stock material at a point downstream of the forming assembly.

21. A method of determining the total length of dunnage products produced by a dunnage conversion machine during a period of time, said method comprising the acts of:

converting stock material into a plurality of three-dimensional dunnage products during the period of time in a dunnage conversion machine;

monitoring the cumulative length of dunnage products produced by the dunnage conversion machine during the conversion of the stock material into each of the cushioning products;

storing in a computer memory information regarding the cumulative length of dunnage products produced by the dunnage conversion machine during the period of time;

retrieving the stored cumulative length information, the retrieved cumulative length information providing an indication of the cumulative length of dunnage products produced by the dunnage conversion machine during the period of time.

22. A method of determining stock material usage by a cushioning conversion machine over a period of time during which a plurality of three-dimensional cushioning products are made, comprising:

converting sheet stock material into the plurality of the three-dimensional cushioning products with the cushioning conversion machine during the period of time;

monitoring the stock material usage by the cushioning conversion machine during the period of time; and

storing information regarding the cumulative amount of stock material usage by the cushioning conversion machine during the period of time in a memory.

23. The method as set forth in claim 22, wherein the monitoring includes monitoring the passage of stock material through the cushioning conversion machine during the period of time.

24. The method as set forth in claim 22, wherein the stored information is indicative of the cumulative amount of stock material that passed through the cushioning conversion machine during the period of time in a memory.

25. The method as set forth in claim 22, wherein the monitoring includes monitoring the cumulative length of cushioning products produced by the cushioning conversion machine during the period of time.

26. The method as set forth in claim 22, wherein the stored information is indicative of the cumulative length of cushioning products produced by the cushioning conversion machine during the period of time in a memory.

27. The method as set forth in claim 22, further comprising retrieving the stored information.

28. The method as set forth in claim 27, wherein the retrieving includes transmitting the stored information to a remote location.

29. The method as set forth in claim 27, wherein the retrieving includes automatically downloading the stored information.

30. The method as set forth in claim 22, wherein the converting is accomplished by a conversion assembly of the cushioning conversion machine.

31. The method as set forth in claim 30, wherein the conversion assembly includes a feed assembly positioned downstream of a forming assembly.

32. The method as set forth in claim 22, wherein the memory is a non-volatile memory.

* * * * *